



OUT\_M(i)=IN\_M(i);

for each symbolic register operand  $s_k$  of instruction  $i$  (Suppose  $s_k$  is the Nth operand)

Find out the value of PrevAssign where  $(s_k \text{ PrevAssign}) \in \text{OUT\_M}(i)$ ;

CurAssign = Regclass ( $s_k, i$ );

if (CurAssign = =C)

    if (PrevAssign! =C)

        if (IsValidRegClassAssignment (i, Nth, PrevAssign))

            Regclass( $s_k, i$ )=PrevAssign;

            continue;      /\*continue the next loop iteration \*/

        else

            CurAssign=GetNextRegClass(Inst, NthOperand);

            If ( $s_k$  is not the destination operand)

                Insert before  $i$  the register class fixup from PrevAssign to CurAssign;

    else

        CurAssign =GetNextRegClass(Inst, NthOperand);

        Regclass ( $s_k, i$ ) =CurAssign;

        Replace ( $s_k \text{ PrevAssign}$ ) with ( $s_k \text{ CurAssign}$ ) in OUT\_M(i);

else

    if ( $(s_k \text{ CurAssign}) \notin \text{OUT\_M}(i)$ )

        if (PrevAssign!=C AND  $s_k$  is not the destination operand)

            insert before  $i$  the register class fixup from PrevAssign to CurAssign;

        Replace ( $s_k \text{ PrevAssign}$ ) with ( $s_k \text{ CurAssign}$ ) in OUT\_M(i);

**Fig. 7**